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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/517,285	12/08/2004	Olivier Gay-Bellile	FR02 0056 US	2778

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PHILIPS ELECTRONICS NORTH AMERICA CORPORATION
INTELLECTUAL PROPERTY & STANDARDS
370 W. TRIMBLE ROAD MS 91/MG
SAN JOSE, CA 95131

EXAMINER

ABDELNOUR, AHMED F

ART UNIT	PAPER NUMBER
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2624

MAIL DATE	DELIVERY MODE
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09/28/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

<p align="center">Office Action Summary</p>	Application No. 10/517,285	Applicant(s) GAY-BELLILE ET AL.	
	Examiner Farras Abdelnour	Art Unit 2624	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1 and 3-8 is/are rejected.
- 7) ☒ Claim(s) 2 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 December 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All . b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date ____ | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____
5) <input type="checkbox"/> Notice of Informal Patent Application
6) <input type="checkbox"/> Other: ____ |
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DETAILED ACTION

Priority

1. Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d). The certified copy has been filed in parent Application No. 02 07 153, filed on June 11, 2002.

Drawings

2. Figures 1-3 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

The USPTO "Interim Guidelines for Examination of Patent Applications for Patent Subject Matter Eligibility" (Official Gazette notice of 22 November 2005), Annex IV, reads as follows:

Descriptive material can be characterized as either "functional descriptive material" or "nonfunctional descriptive material." In this context, "functional descriptive material" consists of data structures and computer programs which impart functionality when employed as a computer component. (The definition of "data structure" is "a physical or logical relationship among data elements, designed to

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support specific data manipulation functions." The New IEEE Standard Dictionary of Electrical and Electronics Terms 308 (5th ed. 1993).) "Nonfunctional descriptive material" includes but is not limited to music, literary works and a compilation or mere arrangement of data.

When functional descriptive material is recorded on some computer-readable medium it becomes structurally and functionally interrelated to the medium and will be statutory in most cases since use of technology permits the function of the descriptive material to be realized. Compare *In re Lowry*, 32 F.3d 1579, 1583-84, 32 USPQ2d 1031, 1035 (Fed. Cir. 1994) (claim to data structure stored on a computer readable medium that increases computer efficiency held statutory) and *Warmerdam*, 33 F.3d at 1360-61, 31 USPQ2d at 1759 (claim to computer having a specific data structure stored in memory held statutory product-by-process claim) with *Warmerdam*, 33 F.3d at 1361, 31 USPQ2d at 1760 (claim to a data structure per se held nonstatutory).

In contrast, a claimed computer-readable medium encoded with a computer program is a computer element which defines structural and functional interrelationships between the computer program and the rest of the computer which permit the computer program's functionality to be realized, and is thus statutory. See *Lowry*, 32 F.3d at 1583-84, 32 USPQ2d at 1035.

3. Claim 8 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter as follows. Claim 8 defines a computer program embodying functional descriptive material. However, the claim does not define a computer-readable medium or memory and is thus non-statutory for that reason (i.e., "When functional descriptive material is recorded on some computer-readable medium it becomes structurally and functionally interrelated to the medium and will be statutory in most cases since use of technology permits the function of the descriptive material to be realized" – Guidelines Annex IV). That is, the scope of the presently claimed computer program can range from paper on which the program is written, to a program simply contemplated and memorized by a person. The examiner suggests amending the claim to embody the program on "computer-readable medium" or equivalent in order to make the claim statutory. Any amendment to the claim should be commensurate with its corresponding disclosure.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

5. Claims 1, 3, and 4 rejected under 35 U.S.C. 102(a) as being anticipated by the applicants' Prior Art figure 3, noting the alternative limitations in the claim (usage of "or").

Regarding Claim 1, Figure 3 teaches a method for processing images, implementing a calculation of cumulative histogram values based on N histogram values (where N = 7 in Fig. 3), said method being characterized in that it comprises calculation stages which use at least two parallel additions (adders in stages 31 and 32 operating in parallel), each addition in a calculation stage leading to an addition result based on two histogram values (each adder has two histogram values for input) or one histogram value and one addition result calculated during a previous calculation stage or two addition results calculated during at least one previous calculation stage (See 302 in Fig. 3 where one histogram value is given and an addition result from the first adder).

Regarding Claim 3, the calculation circuit as depicted in Fig. 3 is rejected on the same premises as Claim 1 above.

Regarding Claim 4, Fig. 3 depicts an image processing system comprising a calculation circuit as claimed in claim 3 (Evaluation of cumulative histogram of an image).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 5-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Prior Art as applied to claim 4 above, and further in view of Q. Tan *et al.* (Tan, Q.; Zhou, M.; Li, J.; Yao, D., "A brief overview of current TV set-top box developments," Systems, Man, and Cybernetics, 1996, IEEE International Conference on, vol.3, no., pp.2127-2132 vol.3, 14-17 Oct 1996).

Regarding Claim 5, Prior Art discloses a method and calculation circuit for calculating cumulative histogram values and its application to image processing (claim 4). Prior Art does not disclose using a set top box. Tan *et al.* teach using set-top box for decoding and decompressing images ("Set-top Box - an addressable communication box is needed to decode the signals as they arrive at the television or PC; depending on the targeted system, it may also need to perform functions such as the decompression of the digital signal or handling of the Return Path," page 2128, column 1).

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It would have been obvious at the time the invention was made to one of ordinary skill in the art to apply Tan *et al.* set-top box decoder to Prior Art image processing for the purpose of receiving and decoding, transmitted images over a network so as to make them accessible to remotely located users.

Regarding Claim 6, Prior Art discloses an image processing system as claimed in claim 4. Prior Art does not disclose a device comprising at least a screen intended to display images. Tan *et al.* teach image display ("Graphic/video functionality - the set-top box must be able to handle scaleable video and multiple simultaneous streams of analog and digital video. It also must be able to generate transitions and special effects comparable to those seen on TV today," page 2129).

It would have been obvious at the time the invention was made to one of ordinary skill in the art to apply Tan *et al.* image display to Prior Art image processing for the purpose of viewing transmitted images.

Regarding Claim 7, Prior Art discloses a method and calculation circuit for calculating cumulative histogram values and its application to image processing (claim 4). Prior Art does not disclose communication networks for transmitting image and a receiver able to receive images. Tan *et al.* teach communication networks for the purpose of transmitting images ("Transmission System - high speed links are required to deliver the vast amount of information in a timely manner. For video the transmission must not only be at a sufficiently high rate but it must also be delivered isochronously. There are a number of different methods of transmission: twisted pair coaxial cable,

fiber optic cable, satellite, microwave, etc.," page 2127, second column. Also consult Fig. 4.1).

It would have been obvious at the time the invention was made to one of ordinary skill in the art to apply Tan *et al.* communications networks to Prior Art image processing for the purpose of viewing transmitted images and making them conveniently accessible for more users.

8. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Prior Art as applied to claim 1 above, and further in view of Pearlman *et al.* (US patent 5,764,807 listed in paper #3).

Regarding Claim 8, Prior Art teaches the corresponding method claim 1. However, Prior Art does not explicitly teach program code instructions for the execution of the stages of the method of claim 1. Pearlman teaches a computer program product comprising a computer readable medium and a computer program. (Column 2, lines 47-53). It is desirable to make a processing method portable from a computer to another computer.

It would have been obvious to one of ordinary skill in the art, at the time of the invention, to store the processing steps of the method taught by Prior Art in a computer readable medium taught by Pearlman, because the combination makes the processing method portable and therefore increases its application.

Allowable Subject Matter

9. Claim 2 objected to as being dependent upon a rejected base claim (claim 1), but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Farras Abdelnour whose telephone number is 571-270-1806. The examiner can normally be reached on Mon. - Thurs. 7:30 - 17:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian P. Werner can be reached on 571-272-7401. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

WENPENG CHEN
PRIMARY EXAMINER

Farras Abdelnour
Examiner
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